Abstract of the Disclosure (separate page) Here it is conjectured that the part of the universe that we see that is expanding is in fact a solution to the Dirac Equation itself, an electron. Recall previous attempts to associate fractalness with a spin 0 boson in lets say the Wheeler De Witt Equation (Tufts U. Seminar, 1990, "Wavefunction of the Universe"). A spin ½ particle is allowed because the spin would be nearly unnoticable due to inertial frame dragging. And of course we know that bosons themselves are composed of spin ½ particles so to make the fractalness universal we need a spin ½ fractal seed particle that the universe is selfsimilar to. The universe could then have an expansion stage (recall electron zitterbwegung motions) and would rotate (spin), but the rotation would be nearly unobservable for an INside observor due to inertial frame dragging. That makes the derivations easy since it means that we can then solve the Einstein equations for a spherical symmetry (getting the old Schwarzchild metric result) with the rotation (involving the Kerr metric) and oscillation (involving the Birkhoff theorem) as mere perturbations. The results are very interesting. Among them is the fact that the universe couldn't have expanded from a point (as in the inflationary scenario), but from a region just large enough to contain the baryons (it could fit within Mercury's orbit). And we also find a generally covariant Dirac equation that has for $E=dt/ds\sqrt{g_{oo}}$. Recall the (Dirac equation) zitterbewegung oscillation for an observor OUTside the horizon. But the Hamiltonian H (which is $\omega=\langle H\rangle/\hbar$ in the zitterbewegung $e^{i\omega t}$) goes as the square root of g_{oo} (where $g_{oo}=1-k/r$) in that $E= dt/ds\sqrt{g_{oo}}$ coming out of the Dirac equation we will derive using metric components. Thus as r gets smaller than k (the horizon), g_{oo} then becomes negative (so the square root of g_{oo} is imaginary) and so ω becomes imaginary in $e^{i\omega t}$. So if the universe is seen from the outside to be oscillating with a $\sin\omega t$ displacement it is then seen from the inside to be moving with a $\sin(i\omega t)=i\sinh\omega t$ displacement, thus it is always ACCELERATING (as a hyperbolic sine) in its expansion rate as seen from the INside observors (i.e., us) frame of reference (I published this result PREdiscovery). Another result is that this is an Ungauged General Relativity if you have a E&M Einstein Equation source with these (harmonic) oscillating leptons (harmonic gauge becomes a real physical coordinate system, so the theory is no longer gauged). Also you can do a radial coordinate

transformation of a E&M ke^2 Einstein equation source to the coordinate system comoving with that $\sinh\omega t$ cosmological expansion. The new term that is then added to the source turns out to be the classical gravitational source. This source can be cancelled by creating an artificial coordinate transformation that annuls the effect of this coordinate transformation. An electrostatic application seems especially appropriate here. A rotating disk (or electron beam) at just abobe 512kV appears to provide this annulment. This is our propulsion result. There is also both new and old experimental evidence that pulsing through 512kV gives propulsive forces(pod, 2001 and Patent numbers 593,138 and 4,661,747).

Drawings (separate page)